Listing and Amendment of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) Network equipment for providing a connection to a local network, said local network comprising at least one software server, said network equipment comprising:

a memory for storing software;

means for providing a connection to said local network; and

means for monitoring a start up of the network equipment to detect a software start up failure, and for generating a software start up failure signal in response to detecting said software start up failure, said software start up failure signal being ~~sent~~ broadcast on the local network for reception by said at least one software server, said software start up failure signal comprising information specifying at least one of:

(i) a nature of said software start up failure, an identification of replacement software to be downloaded, and an identification of a version of the software currently stored in the memory;

(ii) said nature of said software start up failure, and said identification of replacement software to be downloaded; and

(iii) said nature of said software start up failure, and said identification of said version of the software currently stored in the memory.

2. (cancelled)

3. (previously presented) The network equipment according to claim 1, wherein the software comprises at least one of:

a boot program;

configuration data; and

firmware.

4. (previously presented) The network equipment according to claim 3, wherein the software comprises said firmware, and the monitoring means comprises:

means for checking a current firmware verification pattern; and

means for generating said software start up failure signal when said current firmware verification pattern is not valid.

5. (previously presented) The network equipment according to claim 1, wherein the monitoring means comprises:

means for calculating a checksum of the software currently stored in said memory;

means for comparing said calculated checksum to a previously stored checksum; and

means for generating the software start up failure signal when said calculated checksum is not identical to the previously stored checksum.

6. (previously presented) The network equipment according to claim 3, wherein the monitoring means comprises:

means for checking for a presence of the firmware in the memory;

means for rebooting the network equipment if the firmware is not stored in the memory; and

means for generating said software start up failure signal if the firmware is not stored in the memory.

7. (previously presented) The network equipment according to claim 1, wherein the monitoring means comprises:

means for monitoring downloading of replacement software in the memory; and

means for rebooting the network equipment and for generating said software start up failure signal if a problem is detected during said downloading.

8. (previously presented) The network equipment according to claim 3, wherein the software comprises said firmware, and the network equipment comprises:

means for writing a replacement firmware verification pattern corresponding to replacement firmware downloaded in the memory if said replacement firmware is properly recorded in said memory.

9. (previously presented) The network equipment according to claim 1, wherein the monitoring means comprises:

means for monitoring a process of loading said software in said memory; and

means for rebooting the network equipment and for generating said software start up failure signal if a problem is detected during said loading.

10. (previously presented) The network equipment according to claim 1, wherein the monitoring means comprises:

a timer to determine a time limit for a software start up;

means for launching the software start up; and

means for generating said software start up failure signal if the software start up is not completed before an end of the time limit.

11. (previously presented) The network equipment according to claim 1, further comprising user activation means connected to the monitoring means for enabling a user to manually request a download of replacement software.

12. (previously presented) The network equipment according to claim 1, further comprising an alarm connected to the monitoring means for communicating the software start up failure to the user.

13. (previously presented) The network equipment according to claim 1, wherein the monitoring means comprises:

means for checking a setting of a failure flag; and

means for generating the software start up failure signal and for transmitting the software start up signal on the local network in response to detecting that the failure flag is set.

14. (previously presented) The network equipment according to claim 1, wherein an indication of the nature of the software start up failure comprises a series of status flags.

15. (cancelled)

16. (previously presented)   A method for monitoring a software start up for network equipment, the network equipment comprising a memory for storing software and a connector for providing a connection to a local network comprising at least one software server, said method comprising the steps of:

monitoring the software start up for the network equipment to detect a software start up failure;

generating a software start up failure signal in response to detecting said software start up failure; and

automatically broadcasting the software start up failure signal on the local network for reception by said at least one software server, wherein the software start up failure signal comprises information specifying at least one of:

(i) a nature of said software start up failure, an identification of replacement software to be downloaded, and an identification of a version of said software currently stored in said memory;

(ii) said nature of said software start up failure, and said identification of replacement software to be downloaded; and

(iii) said nature of said software start up failure, and said identification of said version of the software currently stored in said memory.

17. (previously presented)   The method according to claim 16, wherein the software start up failure signal comprises a request to the at least one software server for the download of the replacement software in the memory.

18. (previously presented)   The method according to claim 16, wherein the software start up failure signal comprises an identification of the software start up failure for analysis by the at least one software server.

19.   (currently amended)   Network equipment for providing a connection to a local network, said local network comprising at least one software server, said network equipment comprising:

a memory for storing software;

means for providing a connection to said local network; and

means for monitoring a start up of the network equipment to detect a software start up failure, and for generating a software start up failure signal in response to detecting said software start up failure, said software start up failure signal being ~~sent~~ broadcast on the local network for reception by said at least one software server, said software start up failure signal comprising information specifying a nature of said software start up failure.

20. (previously presented)   The network equipment according to claim 19, wherein the software comprises at least one of:

a boot program;

configuration data; and

firmware.

21. (previously presented)   The network equipment according to claim 20, wherein the software comprises said firmware, and the monitoring means comprises:

means for checking a current firmware verification pattern; and

means for generating said software start up failure signal when said current firmware verification pattern is not valid.

22. (previously presented)   The network equipment according to claim 19, wherein the monitoring means comprises:

means for calculating a checksum of the software currently stored in said memory;

means for comparing said calculated checksum to a previously stored checksum; and

means for generating the software start up failure signal when said calculated checksum is not identical to the previously stored checksum.